

Appl. No. 10/613,453
Response dated Dec. 2, 2004
Reply to Notice of Drawing Inconsistency with Specification of Nov. 12, 2004

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning on page 17, line 19, with the following amended paragraph:

FIG. ~~[[32]]~~ 32A is a partial cutaway view of a piezoelectric generator and tire monitor using PVDF film.

Please replace the paragraph beginning on page 17, line 20, with the following amended paragraph:

FIG. ~~[[32A]]~~ 32B is a cutaway view of the PVDF sensor of FIG. ~~[[32]]~~ 32A.

Please replace the paragraph beginning on page 17, line 27, with the following amended paragraph:

FIG. ~~[[35A]]~~ 36A is a schematic of a prior art deployment scheme for an airbag module.

Please replace the paragraph beginning on page 75, line 6, with the following amended paragraph:

Although piezoelectric SAW devices normally use rigid material such as quartz or lithium niobate, it is also possible to utilize polyvinylidene fluoride (PVDF) providing the frequency is low. A piece of PVDF film can also be used as a sensor of tire flexure by itself. Such a sensor is illustrated in FIGS. ~~[[32]]~~ 32A and ~~[[32A]]~~ 32B at 400. The output of flexure of the PVDF film can be used to supply power to a silicon microcircuit that contains pressure and temperature sensors. The waveform of the output from the PVDF film also provides information as to the flexure of an automobile tire and can be used to diagnose problems with the tire as well as the tire footprint in a manner similar to the device described in FIG. 15. In this case, however, the PVDF film supplies sufficient power to permit

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significantly more transmission energy to be provided. The frequency and informational content can be made compatible with the SAW interrogator described above such that the same interrogator can be used. The power available for the interrogator, however, can be significantly greater thus increasing the reliability and reading range of the system.